

October 2019 Datum Change Information – Updated October 2020*

On October 1, 2019, the California Department of Water Resources (DWR) will change the reporting of river stage data collected at 21 locations in the upper Sacramento River and Feather River area from their current datum, either National Geodetic Vertical Datum 1929 (NGVD29), United States Engineering Datum (USED), or Local Datum to the North American Vertical Datum 1988 (NAVD88) standard. Stage forecasts for the 21 locations will be displayed on CDEC in NGVD29/USED/Local datum until October 1, 2019...where it will then be displayed as NAVD88. The change to NAVD88 will affect the monitor stage and flood stages at 13 stations.

The new monitor and flood stages effective October 1, 2019:

Location	New Monitor Stage (feet) NAVD88	New Flood Stage (feet) NAVD88	Old Monitor/Flood Stage (feet)
Sacramento River at Red Bluff Diversion Dam	252.5	255.5	250 / 253
Sacramento River at Tehama Bridge	206.5	209.5	210 / 213
Sacramento River at Vina Bridge	180.0	183.0	180 / 183
Sacramento River at Hamilton City	142.0	147.0	143 / 148
Sacramento River at Ord Ferry	110.0	114.0	110 / 114
Sacramento River at Butte City	88.5	97.0	89 / 97.2
Sacramento River at Moulton Weir	76.2	83.8	76.8 / 84.4
Sacramento River at Tisdale Weir	44.1	51.6	45.5 / 53
Sacramento River at Colusa Weir	60.9	70.1	61.8 / 71
Middle Fork Feather River near Portola	4851.0	4852.5	7.5 / 9
Feather River near Gridley*	94.0	103.0	95 / 103.8
Feather River at Yuba City	64.0	79.5	65 / 80.2
Butte Creek near Durham	190.5	198.0	13 / 20.5

The accuracy of the datum exceeds the accuracy of the forecast model. The forecast model accuracy diminishes below 0.5 feet so for forecast purposes values are rounded to nearest 0.5 feet at non-weir locations.

National Geodetic Survey (NGS) Adjustments to NAVD88 Survey effective October 1, 2019:

Station	Transmitted to CDEC	Station Name	CDEC ID	Adjustment values to get NAVD88 from old datum values ^a
A02750	Y	Sacramento River at Red Bluff Diversion Dam	RDB	2.6
A02730	Y	Sacramento River at Tehama Bridge	TEH	-3.3
A02700	Y	Sacramento River at Vina Bridge	VIN	-0.1
A02630	Y	Sacramento River at Hamilton City	HMC	-0.8
A02570	Y	Sacramento River at Ord Ferry	ORD	-0.2
A02500	Y	Sacramento River at Butte City	BTC	-0.5
A02986	Y	Sacramento River at Moulton Weir	MLW	-0.6
A02960	Y	Sacramento River at Tisdale Weir	TIS	-1.4
A02981	Y	Sacramento River at Colusa Weir	CLW	-0.9
A55420	Y	Middle Fork Feather River near Portola	MFP	4843.6
A05165	Y	Feather River near Gridley*	GRL	-0.74
A05135	Y	Feather River at Yuba City	YUB	-0.8
A04265	Y	Butte Creek near Durham	BCD	177.5
A42105	Y	Big Chico Creek near Chico	BIC	274.3
A02972	Y	Butte Slough near Meridian	BSL	-1.4
A02984	Y	Cherokee Canal near Richvale	CHC	90.5
A54310	Y	Indian Creek below Indian Falls	ICR	3103.2
A55100	Y	Feather River at Merrimac	MER	1598.3
A05775	Y	South Honcut Creek near Bangor	SFH	615.1
A03500	Y	Thomes Creek at Paskenta	THO	695.5
A52260	Y	West Branch Feather River near Magalia	WFR	1537.9

^a(old datum value) + (adjustment value) = (NAVD88 value)